



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/772,288 | 02/06/2004 | Toru Sasaki | JIM-0226 | 4915 |

38834 7590 09/29/2006

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP
1250 CONNECTICUT AVENUE, NW
SUITE 700
WASHINGTON, DC 20036

| |
|----------|
| EXAMINER |
|----------|

KOVALICK, VINCENT E

| | |
|------------|--------------|
| • ART UNIT | PAPER NUMBER |
|------------|--------------|

2629

DATE MAILED: 09/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/772,288

Applicant(s)

SASAKI, TORU

Examiner

Vincent E. Kovalick

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3 and 6-8 is/are allowed.
- 6) ☒ Claim(s) 4 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 2/6/04 & 2/27/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to Applicant's Patent Application, Serial No. 10/772,288, with a file date of February 6, 2004.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishigaki (USP 6,246,180) taken with Matsumoto (Pub. No. 2004/0095299).

Relative to claim 4, Nishigaki **teaches** an Organic EL Display Device having an Improved Image Quality (col. 2, lines 43-64); Nishigaki further **teaches** in an EL display that drives EL elements on the basis of a video signal, and EL display comprising a switch for discharging charges in a capacitor provided in each of pixels composed of said EL elements and displaying each of the pixels in black (col. 6, lines 45-61).

Nishigaki **does not teach** control means for turning said switch on at timing a predetermined time period prior to the subsequent video writing into the pixel.

Matsumoto **teaches** a Display Driver Circuit (pg. 1, paras. 0013-0014); Matsumoto further **teaches** control means for turning said switch on at timing a predetermined time period prior to the subsequent video writing into the pixel (pg. 5, claim 6).

Art Unit: 2629

It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide to the device as taught by Nishigaki, the feature as taught by Matsumoto in order to erase the existing pixel data levels and pre-set the pixels to receive the current video signal levels.

Allowable Subject Matter

4. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 5, the major difference between the teachings of the prior art of record (Nishigaki (USP 6,246,180) taken with Matsumoto (Pub. No. 2004/0095299)) and that of the instant invention is that said prior art of record **does not teach** an EL display wherein there is provided a vertical shift register for black display, and a black writing start signal inputted to the vertical shift register for black display at predetermined timing.

5. Claims 1-3 and 6-8 are allowed.

6. The following is an examiner's statement of reasons for allowance:

Relative to claim 1, the major difference between the teachings of the said prior art of record and that of the instant invention is that said prior art of record **does not teach** a driver that drives a display composed of EL elements on the basis of a video signal, and EL display driver characterized by comprising: means for forming non-luminescent state in all the EL elements utilizing a vertical blanking period of said video signal; and correction means for correcting the luminance of said video signal such that the shorter a video display time period provided to the

Art Unit: 2629

EL element becomes, the higher the input video luminance of the EL element becomes in order to form said non-luminescent state.

Regarding claim 6, , the major difference between the teachings of the said prior art of record and that of the instant invention is that said prior art of record **does not teach** a driver that drives a display composed of EL elements on the basis of a video signal, an EL display driver comprising: means for forming a non-luminescent state in all the EL elements utilizing a vertical blanking period of said video signal; an analog-to-digital converter for converting said video signal into video data, means for writing said video data into a memory; means for reading out the video data from said memory such that the direction of video supply in a one-field video is reversed for each field; and means for reversing the direction of video writing into said display for each field in correspondence with the reversal of said direction of video supply for each field.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

| | | |
|------------------|-----------------|----------------|
| U. S. Patent No. | 7,023,141 | Anzai et al. |
| U. S. Patent No. | 6,351,076 | Yoshida et al. |
| Pub. No. | US 2004/0113872 | Nanno et al. |
| Pub. No. | US 2002/0190664 | Tanaka et al. |


Art Unit: 2629


To Respond

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vincent E. Kovalick whose telephone number is 571-272-7669. The examiner can normally be reached on Monday-Thursday 7:30- 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Vincent E. Kovalick
September 20, 2006


BIPIN SHALWALA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600